(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property **Organization**

International Bureau



(43) International Publication Date 6 October 2005 (06.10.2005)

PCT

(10) International Publication Number WO 2005/093388 A1

- G01N 1/28, (51) International Patent Classification⁷: C12M 1/34, C12Q 1/68, G01N 37/00, B01L 11/00, G01N 21/05
- (21) International Application Number:

PCT/CA2005/000458

- (22) International Filing Date: 29 March 2005 (29.03.2005)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/556,372

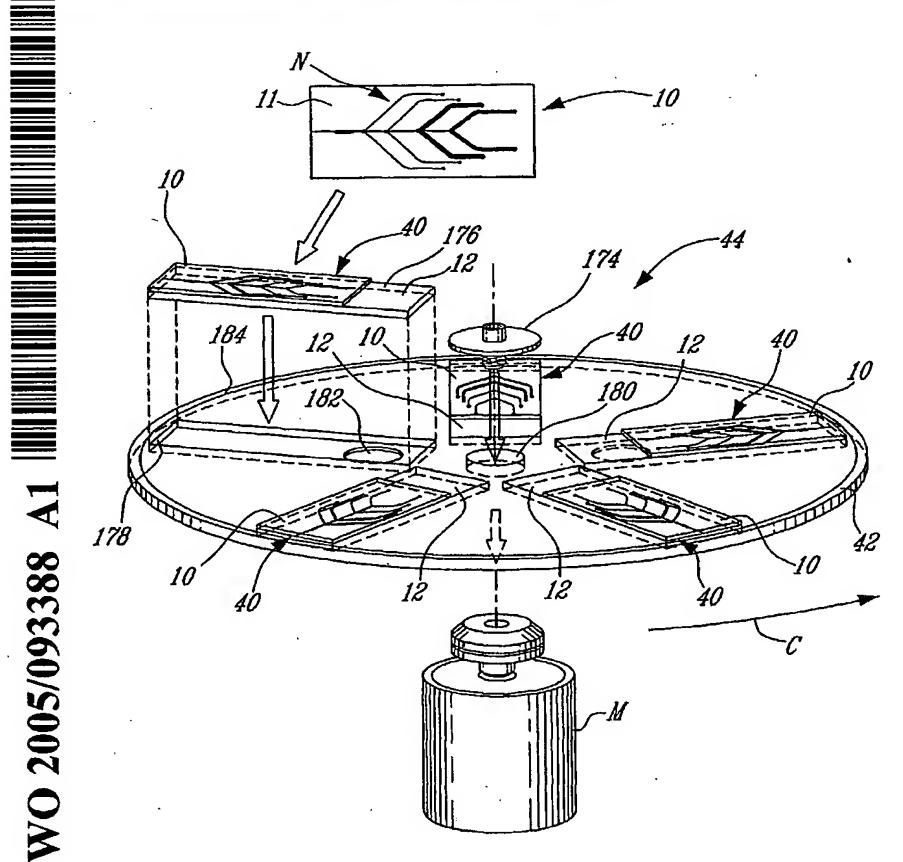
US 26 March 2004 (26.03.2004)

- (71) Applicant (for all designated States except US): INFEC-TIO RECHERCHE INC. [CA/CA]; 2795 boul. Laurier 200, Ste-Foy, Quebec G1V 4M7 (CA).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): PEYTAVI, Régis

- [CA/CA]; 504, rue de l'Eglise, Appt. 3, St-Romuald, Quebec G6W 3J1 (CA).
- (74) Agents: FORGET, Janique et al.; BCF LLP, 1100 Rene-Levesque Blvd. West, 25th Floor, Montreal, Quebec H3B 5C9 (CA).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: REMOVABLE MICROFLUIDIC FLOW CELL



(57) Abstract: microfluidic Α flow cell for removably interfacing removable-member for performing a reaction therebetween. The microfluidic flow cell device comprises at least one reaction portion defining with the removable-member a reaction chamber when in an interfaced position thereof. The microfluidic flow cell comprises at least one fluid-receiving portion for receiving a fluid therein and being in fluid communication with the reaction chamber. When the microfluidic flow cell and the removable-member are in the interfaced position, the cell is adapted to allow for the fluid in the fluid-receiving portion to flow to the reaction chamber. Devices, systems and methods comprising this microfluidic flow cell are also disclosed.

WO 2005/093388 A1



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

with international search report